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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/579,395	12/27/1995	WILLIAM H. SWAIN		4200
7590	11/18/2003		EXAMINER	
WILLIAM H SWAIN 4662 GLEASON AVE SARASOTA, FL 34242			KARLSEN, ERNEST F	
			ART UNIT	PAPER NUMBER
			2829	
			DATE MAILED: 11/18/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	08/579,395	SWAIN, WILLIAM H.
	Examiner	Art Unit
	Ernest F. Karlsen	2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 24 April 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 32-66 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 32-66 are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \*    c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

Due to the large number of issues, which are petitionable, rather than appealable, raised by the Appeal Brief of April 24, 2003, the Final Rejection is withdrawn in order that all of the issues of the Appeal Brief may be addressed in the proper manner. The finality of the Final Rejection is withdrawn and vacated.

The above procedure returns the status of the Applicant's application to its status prior to the Final Rejection, that is, under rejection with a restriction in place.

Applicant's response of December 18, 2001 failed to comply with the requirements of the Restriction Requirement of October 31, 2001 because Applicant did not list all claims readable on the elected species as required in the first paragraph of page 4 of the Restriction Requirement of October 31, 2001. The Restriction Requirement of October 31, 2001 contained an error by the Office in that claims 41 and 42 should have been in Group III rather than Group II and claims 41 and 42 should have been withdrawn in Office Actions subsequent to October 31, 2001.

Applicant has argued that the most recent restriction is improper and that his species are to a "Better-SNR" species and to a "Combiner species". (See pages 3 and 9 of Applicant's Appeal Brief.) Therefor the previous restriction is withdrawn and the following restriction substituted therefor:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 32-38, 43, 48-54, 59, 64 and 66 are drawn to a process of making, classified in class 29, subclass 602.1.
- II. Claims 39, 40, 44-47, 55, 56, 60-63 and 65 are drawn to an apparatus, classified in class 324, subclass 127.

III. Claims 41, 42, 57 and 58 are drawn to a method of use, classified in class 324, subclass 127.

The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process of making can be used to make plural devices as disclosed.

Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case plural devices can be used to perform the process as disclosed.

Each of Inventions I and III do not require the remaining of Inventions I and III because, for instance, the apparatus produced by the method of making method of claim 43 cannot be used to practice the method of use method of claim 41 because the apparatus resulting from the method of making method of claim 43 does not have a structure where the combining is computed during a time when both the signal input and the noise are essentially constant or two sensors which operate continuously as necessary for the practice of the method of using method of claim 41 and the apparatus

used to practice the method of use method of claim 41 cannot be made by the method of making method of claim 43 and because the apparatus that would be used to practice the method of use method of claim 41 does not require an adjusting means, a core of low magnetic reluctance material and a low impedance means as required by the method of making method of claim 43.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

With the election of any one of the above inventions further election of species is required as follows:

This application contains claims directed to the following patentably distinct species of the claimed invention:

1. The simpler form species where SNR is substantially improved by operating at a more favorable operating parameter, wherein noise is not cancelled as set forth at the bottom of page 1 of Applicant's specification and identified by Applicant on page 3 of his Appeal Brief as the "Better-SNR species".

2. The "Combiner species" as illustrated in Figures 9, 11 and 12 and those portions of the specification respectively related thereto and by the description of combining the outputs of two separate sensors as described on page 1 of the

specification, the combiner species again being identified by Applicant on page 9 of his Appeal Brief as the "combiner species".

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

If the "Combiner" species is elected further election of subspecies is required as follows: (Read "species" as "subspecies".)

This application contains claims directed to the following patentably distinct species of the claimed invention:

1. The subspecies of Figure 9.
2. The subspecies of Figure 11.
3. The subspecies of Figure 12.
4. The subspecies where two sensors are used as set forth on page 1 of the specification.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

If the "Better-SNR" species is elected further election of subspecies is required as follows: (Read "species" as "subspecies".)

This application contains claims directed to the following patentably distinct species of the claimed invention:

1. The subspecies that includes a Hall device.
2. The subspecies that does not include a Hall device.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include

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all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication should be directed to Ernest F. Karlsen at telephone number 703-305-4768.

Ernest F. Karlsen

November 7, 2003



ERNEST KARLSEN  
PRIMARY EXAMINER